

ABSTRACT

A microfluidic device preferably made of a thermoplastic polymer that includes a channel or a multiplicity of channels whose surfaces are modified by photografting. The device further includes a porous polymer monolith prepared via UV initiated polymerization within the channel, and functionalization of the pore surface of the monolith using photografting. Processes for making such surface modifications of thermoplastic polymers and porous polymer monoliths are set forth.